

SENIOR CIVIL ENGINEER

POSITION SUMMARY: The Senior Civil Engineer manages a wide range of engineering projects and surveying services, ensuring that projects are completed in accordance with acceptable laws, codes, ordinances and accepted practices. This is a professional position requiring a Michigan Professional Engineer's License. The Civil Engineer shall be fully competent in all conventional aspects of Civil Engineering as it applies to municipal projects and problems. Plans and conducts work requiring judgment in the independent evaluation, selection, and adaptation and modification of standard techniques, procedures, and criteria. Devises new approaches to problems encountered.

SUPERVISION RECEIVED: Work is performed under the Assistant Director of Public Works Engineering. Independently performs most assignments with instruction as to the general results expected. Receives technical guidance on unusual or complex problems and supervisory approval of proposed plans and reports.

SUPERVISION EXERCISED: May supervise the work of technicians and others who assist in specific assignments.

ESSENTIAL JOB FUNCTIONS: *An employee in this position may be called upon to do any or all of the following essential functions. These examples do not include all of the duties which the employee may be expected to perform. To perform this job successfully, an individual must be able to perform each essential function satisfactorily.*

1. Supervises subordinate personnel as assigned, provides training and instruction, and monitors performance. Responsible for projects and work conducted under Professional Engineer's License.
2. Demonstrates ability in investigating, designing, performing construction management and inspecting capital improvement projects including paving, roadway improvements, water mains, sewers, culverts, building demolition, bridge work, and other major renovations.
3. Leads design teams in the layout of streets and utilities, performs hydraulic computations and pavement analysis to ensure compliance with applicable rules, codes and regulations. Drafts construction plans and delegates drafting assignments as appropriate.
4. Coordinates site plan reviews and makes site inspections and reviews plans submitted by consultants to ensure compliance with City specifications, codes, and conformity with established practices and standards.
5. Facilitates the permit process by explaining and interpreting relevant codes and ordinances, clarifying procedures, and directing applicants through the process. Reviews and authorizes permits for utilities, concrete and other permits as warranted. Applies for necessary water, sewer, wetland, floodplain and other permits as needed.
6. Maintains technical records, construction drawings, site plans, plats, and other documents. Performs research, conducts special studies, and provides information as requested.
7. Demonstrates ability in assisting with managing and coordinating contracted services and grant-funded projects. Provides project oversight and quality control.

8. Coordinates development projects with consulting engineers, other City departments, developers, and regulatory agencies to facilitate the process, ensure efficiency and reduce duplication in effort.
9. Acts as liaison between the City, citizens, contractors, other governmental agencies, developers, and municipal professionals regarding engineering issues.
10. Demonstrates knowledge regarding professional trends, attends professional meetings and seeks opportunities for professional growth. Keeps abreast of changing regulations and policies and other developments in the engineering field.
11. Maintains cooperative relationships with peer agencies and other governmental units.
12. Demonstrates skill in assisting with the implementation of new technology and fosters departmental transition to new or upgraded technology, including the establishment of a GIS system. Provides information and technical support to other departments and the public.
13. Reviews site plans for commercial, residential, and industrial development for compliance with applicable regulations and codes. Investigates citizen's complaints and takes necessary action to ensure compliance with applicable regulations and codes.
14. Conducts or attends public and community meetings on proposed projects.
15. Contributes to policy making.
16. Performs special engineering studies, and makes recommendation for action to the Assistant Director of Public Works/Engineering.
17. Investigates citizen's complaints and takes necessary action to ensure compliance with applicable regulations and codes. Performs related work as required.

KNOWLEDGE, SKILLS, AND ABILITIES: *The requirements listed below are representative of the knowledge, skills, abilities and minimum qualifications necessary to perform the essential functions of the position. A qualified individual with a disability must be able to perform the essential functions of the position with or without reasonable accommodation.*

- A. A Bachelor's degree in civil engineering or a related field, supplemented with training and experience in civil engineering.
- B. A Michigan Professional Engineer's License.
- C. Knowledge of the professional public management techniques involved in personnel administration, public relations, and project management.
- D. Knowledge of the principles, practices and procedures of civil engineering and its application.
- E. Demonstrates skill in interpreting, reviewing and understanding complex engineering plans to ensure safe and reliable construction.
- F. Demonstrates skill in reviewing and interpreting site plans, blueprints, specifications and

complex construction drawings.

- G. Demonstrates the ability to establish effective working relationships and use good judgment and resourcefulness when dealing with builders, architects, planners, property owners, the public, other professional contacts, and municipal officials.
- H. Demonstrates the ability to critically assess situations, solve problems, and work effectively within deadlines, and changes in work priorities.
- I. Demonstrates the ability to work efficiently with limited supervision.
- J. Demonstrates effective communication skills, both written and verbal and maintains a positive working relationship with staff, peers, contractors, builders, the public and other municipal officials.
- K. Demonstrates the ability to gather and analyze data for the purpose of preparing accurate and timely reports, memoranda, letters, and responses to requests for information.
- L. Demonstrates skill in the use of office equipment and technology, including computers and software programs, and the ability to master new technology.
- M. Demonstrates skill in organizing schedules and coordinating associated resources.

PHYSICAL DEMANDS AND WORK ENVIRONMENT: *The physical demands and work environment characteristics described here are representative of those an employee encounters while performing the essential functions of the job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.*

While performing the duties of this job, the employee is regularly required to talk, hear and view construction sites or documentation. The employee frequently is required to stand; walk; use hands to finger, handle, or feel; and reach with hands and arms. The employee must frequently lift and/or move items of light to moderate weights.

While performing the duties of this job, the employee works in a business office setting and in the field. In the course of field activities, the employee is exposed to outside weather conditions. The noise level in the work environment is usually quiet in the office, and may become loud in field situations.

December 2005
Format Revised February 2020